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AVAILABLE NOW!

## **BIG 2ND EDITION**

### **A SURVEY OF COMMERCIAL TURNKEY CAD/CAM SYSTEMS**

THEODORE H NELSON  
P.O.B. #3  
S MOUNTAIN

NJ 07870\*\*

**YOU NEED TO SAVE THAT TIME.**

It took several CAD/CAM professionals a year of part-time work to compile this information — even with excellent cooperation from the staffs of the vendors.

**WHY DO YOU NEED THIS REPORT?**



**Productivity International, Inc.**

A Network of Professionals

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Dallas, Texas 75205, U.S.A.

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**NEW FOR 1980**

**NOW IS THE TIME TO PLAN  
FOR PRODUCTIVITY IMPROVEMENT**

## **NEW FEATURES IN THE 2<sup>ND</sup> EDITION**

**THE INTRODUCTION AND MANAGEMENT CONSIDERATIONS  
SECTIONS HAVE BEEN EXPANDED, AND IN ADDITION —**

- FOR 1980 THERE ARE OVER 40 VENDORS PRESENTED!
  - OVER 100 KEY QUESTIONS ARE ANSWERED BY EACH VENDOR.
- PLUS
- THERE ARE SECTIONS ON
    - HARDWARE THAT IS POPULAR FOR CAD/CAM APPLICATIONS
    - SOFTWARE PACKAGES
    - GUIDES FOR DEVELOPING YOUR SYSTEM
    - COST JUSTIFICATION PROCEDURES

The First Edition of "the Survey" was acclaimed by both vendors and industrial users. CAD/CAM has come a long way during 1979. *Financial World* magazine featured CAD/CAM

in the July 1, 1979 issue as the technological key to industrial productivity improvement. This Survey gives you the help you need to use this new technology to your advantage.

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# CAD/CAM

## COMPUTER AIDED DESIGN (CAD) AND COMPUTER AIDED MANUFACTURING (CAM)

### WHY THIS STUDY?

Being consultants in the productivity area specializing in CAD/CAM, we realize that most of the companies yet to benefit from these techniques are just now beginning to look at turnkey systems.

The purpose of this report is to give you a fast start on the who, what, when, where, why and how of commercial turnkey CAD/CAM systems.

### WHAT IS A TURNKEY CAD/CAM SYSTEM?





red winning two schools of thought on this question. The first emanates from the drafting field and views a turnkey CAD/CAM system as a minicomputer-based drafting/design aid with stand-alone capability. The second emanates from large-scale engineering computation and visualizes terminals remote from a host mainframe computer with the ability to support design drafting and heavy computation. From either type vendor you can purchase or lease a hardware/software package (Turnkey System) that will help you increase your engineering productivity.

## OUR INTENTION

It is our intention to have the reader of this report save countless hours of searching. Searching for the CAD/CAM systems vendors, the questions to ask, and some of the answers.

## BENEFITS

A list of over 20 potential benefits of using CAD/CAM techniques.

## THE VENDORS

A picture of a typical system from the vendors included in the study is accompanied by their address, phone number, Telex number or TWX number.

## GUIDES FOR DEVELOPING YOUR SYSTEM

Whether you are installing your first system, or enhancing what you have, you must in effect "audit" your operation. This section tells you how to collect the pertinent data to develop a pro-forma workload for cost/benefit justification.

## THE TABULAR COMPARISON

This 106 page table is a matrix of the answers to over 100 key questions for each of over 40 vendors — over 3000 cells of information!

For each of the vendors you will find the answers to such questions as:

- What is the typical designer/draftsman productivity improvement ratio?
- What is the number of user terminals allowed per system?
- What computer/word length/execution speed is used?
- Does the system support on-line communication with host processors?
- What are the input and output devices?
- Is bill-of-material capability available?
- Are objects described in 2, 2½, or 3-D?
- Is dimensioning automatic, semi-automatic or manual?
- Is the source code available?
- Where are spare parts stocked?

And for software packages you will find answers to questions such as:

- Price and terms?
- Is error checking supported?
- Can design work and applications development be done simultaneously?
- Is software open-ended?
- Can active and non-active drawings be merged?

## OTHER CONSIDERATIONS

*The purpose of this brief section of the report is to stimulate your thinking.* Helping you solve your problem with a quick guide is out of the question. Your own unique corporate infrastructure will determine many aspects of the approach that is right for you. Realize that while the following considerations are categorized in the report for your ease in reading, they are all truly inter-twined and interdependent.

## ORGANIZATIONAL IMPACT

This material explains several key impact areas, and discusses potentially significant management changes.

## COST/BENEFIT TRADEOFFS

Recurring and non-recurring costs are described along with key economic factors. Purchase or lease is discussed, and cash flow analysis is explained.

## GROWTH

You are bound to have some degree of success with your move into CAD/CAM, and when you do, your expectations will rise. You can count on new computer technology continuing to roll forth — usually cheaper, certainly more powerful, and probably requiring software changes. Then will your CAD/CAM system grow in a debugged way at the pace you want?

**THE CAD/CAM GLOSSARY  
IS A SOFT COVERED, 206  
PAGE BOOK CONTAINING  
OVER 2000 CAD/CAM WORDS  
AND THEIR DEFINITIONS.  
THIS INFORMATION IS  
VITAL FOR MEETING THE  
CHALLENGES IN TODAY'S  
COMPUTER BASED INDUSTRIAL  
WORLD.**



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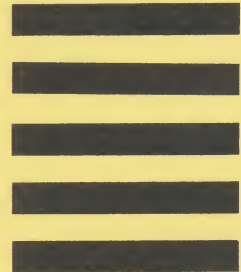
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